

## *Agrochola elami*, a new species for the fauna of Turkey (Lepidoptera, Noctuidae)

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**Abstract:** *Agrochola elami*, a new species for the fauna of Turkey (Lepidoptera, Noctuidae). *Cesa News* 146: 1-4, 6 figs.

*Agrochola elami* Benedek & Ronkay was described from Iran (Lorestan), and reported here from SE Turkey for the first time. The species was recorded from two different but neighbour provinces, Van and Hakkari. Adult and male genitalia are illustrated and compared with *Agrochola kindermanni*. Subgeneric status of *Agrochola elami* is also discussed.

**Key words:** *Agrochola elami*, *kindermanni* Noctuidae, Lepidoptera, fauna, Van, Hakkari, Turkey.

First authors evaluated and published most of the Noctuidae material from Bahçesaray district (Van Province, East Turkey) collected by them in 2016 (Kemal & Koçak, 2016). Among the rest and undetermined material, several *Agrochola* specimens, close to *mansueta*, drew the attention of the authors. After preparing and dissecting the male genitalia, it was seen that there are some similarities to *mansueta*, and important differences from it. On the other hand, the third author collected a male from Dağlıca, during her excursions in 2017, which is the same with the *Agrochola* specimens from Bahçesaray.

The aim of this short paper is to determine these material and to evaluate its faunistic and taxonomic status.

The male and its genitalia from Bahçesaray are illustrated below (**Figs. 1,2**).

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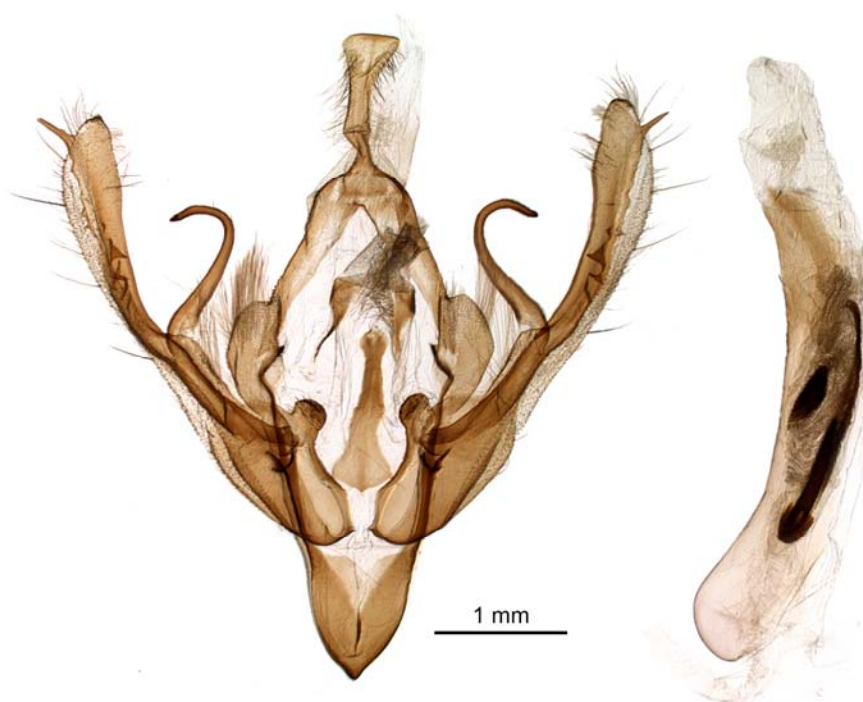
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**Fig. 1** – *Agrochola elami*. Upperside of male from Van Province, Bahçesaray, Upper Mukus Valley 1840m on 23 10 2016, M. Kemal (Cesa)



**Fig. 2** – *Agrochola elami*. Male genitalia with removed aedeagus. GP2763♂, M. Kemal (Cesa)

Ronkay (1984) established the subgenus *Frivaldskyola* of the genus *Agrochola* Hbn., with the type-species *Cerastis mansueta* H.-S. He also designated a male as Lectotype, from “Smyrna” [=İzmir] from Frivaldsky’s Collection, preserved in the Hungarian Natural History Museum, Budapest. Ronkay illustrated adults of the Lectotype and Paralectotype, as well as male and female genitalia of the Paralectotypes of *mansueta*. The male genitalia of the specimens from Dağlica and Bahçesaray look like very much essentially. Therefore, we consider it a species in the subgenus *Frivaldskyola*.

After 17 years, Benedek & Ronkay (2001) described two *Agrochola* species from Asia. One of them was from Iran (Lorestan), with the original combination “*Agrochola (Anchoscelis) elami*”. They compared *elami* with *kindermanni* species-group of the subgenus *Anchoscelis*. We are of the opinion that the genitalia of *kindermanni* and *elami* are so different that they cannot be compared (**Figs. 3-5**). As to the identities of Bahçesaray and Dağlica *Agrochola*, the male genitalia and the external markings and colouration fit very well to *Agrochola elami* (cf. Benedek & Ronkay, 2001: figs. 2, 9). Especially the long, terminally spatulated uncus and its distal part strongly curved; elongated fultura inferior, shape of the distal part of valva, S-shaped harpe, shape of aedeagus together with the denticulations of vesica and very long cornutus. All these internal characters facilitate the recognition of this species. Thus, the first problem regarding the identity of the specimens is solved.

**Faunistical evaluation:** The species is currently known only from its type-locality in Iran (Lorestan). Therefore, this record is the first one for *elami* in Turkey. Namely, new to the fauna of Turkey. Moreover, new records for Van and Hakkari Provinces.

**Taxonomical status:** Although *elami* has been described originally in the subgenus *Anchoscelis* of the genus *Agrochola* Hbn., the correct place for it is *Frivaldskyola* Ronkay, 1984, which is currently considered as a subgenus of *Agrochola* Hbn. Therefore, we propose here *elami* as a species of *Frivaldskyola*, with the following name combination:

*Agrochola (Frivaldskyola) elami* Benedek & Ronkay, 2001 (**stat.n.**)

Material examined: 17♂♂. East Turkey, Van Province, Bahçesaray, Upper Mukus Valley 1840m (65Am4), 23 10 2016, GP2763. M.Kemal, A.Koçak & H.Uçak leg. - 1♂. SE Turkey, Hakkari Province, Yüksekova, Dağlıca 1720m, GP2758, 18 10 2017, H. Uçak leg. (Cesa)

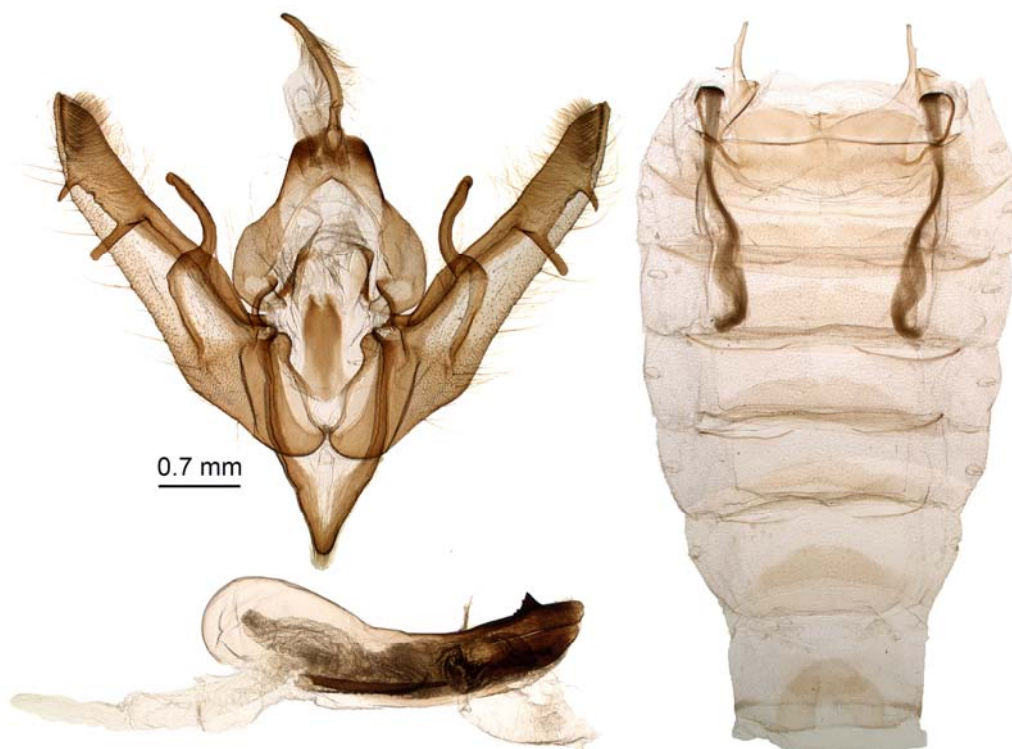
Habitat: Subalpine mountain steppe, between 1720-1840m (**Fig. 6**)

Flight period: October, univoltine.

Range: Turkey (Van, Hakkari), Iran (Lorestan).



**Fig. 3** – Upperside of male of *Agrochola (Anchoscelis) kindermanni*. East Turkey, Van Province, Bahçesaray, Upper Mukus Valley 1840m, 23 10 2016, M. Kemal (Cesa)



**Figs. 4-5** – Male genitalia of *Agrochola (Anchoscelis) kindermanni* with removed aedeagus and abdominal skin with a pair scent organs. GP2764♂. East Turkey, Van Province, Bahçesaray, Upper Mukus Valley 1840m, 23 10 2016, M. Kemal (Cesa)





**Fig. 6** - Habitat of *Agrochola elami* and *kindermanni*. Bahçesaray, Upper Mukus Valley 1840m (65Am4), on 23 10 2016, M. Kemal (Cesa)

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